

- (b) adding 100 ml of Tris buffer saline for every 10 ml of yolk;
- (c) removing the precipitate by centrifugation;
- (d) adding to the supernatant the precipitating solution of magnesium chloride and phosphotungstic acid for centrifuging;
- (e) discarding the pellet;
- (f) adding to the supernatant a water soluble protein fraction 12% polyethylene glycol;
- (g) incubating for 10 minutes and then centrifuging again;
- (h) precipitating out the antibody;
- (i) adding 10 ml of 10mM phosphate buffer to dissolve the precipitate;
- (j) cooling the antibody solution 0°C;
- (k) adding 10 ml of pre-cooled ethanol;
- (l) centrifuging the solution at 4°C and dissolving the sediment in 10 mM phosphate buffer; and
- (m) dialyzing against phosphate buffer for 24 h at 4°C to obtain the yield of antibodies.

7. A process as claimed in claim 1, wherein harvesting of antibodies as defined in step(g) of claim 1, can also be conducted as follows:

- (a) obtaining the egg yolk from the eggshell without rupturing the yolk membrane;
- (b) adding for every 10 ml of yolk, 10 ml of distilled water;
- (c) adding about 0.15 % of kappa- carragenanin and left to stir for 30 minutes at room temperature;
- (d) filtering and centrifuging the solution at for 15 minutes;
- (e) passing through the DEAE – sephacel column prepared with 20 mM phosphate buffer pH 8.0;
- (f) eluting with 0.2 M phosphate buffer pH 8.0;
- (g) collecting the eluate and the absorbance read at 280 nm; and
- (h) pooling and storing the peak fractions containing the antibody at 4 ° C.

8. A process as claimed in claim 6, wherein the lipid from egg yolk is precipitated out twice using the precipitating solution of phosphotungstic acid and magnesium chloride and centrifuged obtaining the antibody yield up to 75% from supernatant.
9. A process as claimed in claim 6, wherein pH of the water soluble protein fraction obtained after the removal of the lipids is adjusted to pH 5.0 to further precipitate out the antibodies for obtaining a yield of 80 –90%.
10. A process as claimed in claim 7, wherein the yield of antibody is to the extent of 73%.
11. A process as claimed in claim 1, wherein the hyper immune eggs are collected daily and stored 40⁰C until further use.
12. A process as claimed in claim 1, wherein commencing the production of the antibody from 7th day after the immunization and continued for 60 days.
13. A process as claimed in claim 1, wherein the titer of the antibody produced is 165-225 mg/ml.
14. A process as claimed in claim 1, wherein production of the egg yolk antibody is more/ equally sensitive to the polyclonal / monoclonal antibodies produced using mammals.
15. A process as claimed in claim 1, wherein production of the egg yolk antibodies relates to small molecules of pesticides.